ded in severe *Enterobacter* (especially), *C. freundii*, *Serratia* and *Morganella* infections, especially as there are good therapeutic alternatives with less risk. The exception would be urinary tract infections, where the high cephalosporin concentrations can overwhelm even derepressed mutants. Finally, the consequences of selecting derepressed mutants should be re-emphasised. Recent work by Cosgrove *et al.* [15] suggested that selection of cephalosporin resistance in *Enterobacter* spp. during therapy was associated with a doubling of mortality, a median 9-day increase in hospital stay, and an attributable cost / patient of $29 000.

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Use of inhaled ampicillin–sulbactam against multiresistant *Acinetobacter baumannii* in bronchial secretions of intensive care unit patients

Acinetobacter baumannii is responsible for a wide range of nosocomial infections, often associated with ventilated patients in intensive care units (ICUs) [1]. In a recent *Clinical Microbiology and Infection* review, Levin [2] suggested that ampicillin–sulbactam could be used for the treatment of acinetobacter infections. Most supporting studies have used intravenous or oral forms of this antibiotic combination. Here we report the use of an aerosolised form of ampicillin–sulbactam for the treatment of ventilated ICU patients.

Twenty intubated, mechanically ventilated patients (12 male and eight female; aged 38–70 years) were enrolled in the study. Multiresistant *A. baumannii*, sensitive only to ampicillin–sulbactam, was isolated from the bronchial secretions of each patient (10^7–10^8 CFU/mL). Patients were randomly assigned to receive ampicillin–sulbactam in either combined aerosolised and intravenous form (ten patients) or only

intravenously (ten patients). The dosage of the aerosolised antibiotic was 3 g in 3 mL of sterile water administered via a nebuliser every 8 h, whereas the intravenous ampicillin–sulbactam was administered in doses of 3 g every 8 h. Quantitative cultures of bronchial secretions, together with routine blood chemistry and chest radiograph results, were obtained on a daily basis over a 7-day period.

In the patients who received both aerosolised and intravenous ampicillin–sulbactam, the viable counts of *A. baumannii* reduced from 10^7–10^8 to $<10^2$ CFU/mL after 2–3 days of treatment. In contrast, the counts from the patients who only received the intravenous antibiotic showed no significant decrease after 2–3 days, and a decrease to 10^5–10^6 CFU/mL after therapy for 7 days.

A. baumannii is frequently associated in ICU patients with severe, potentially fatal pneumonia, as well as multiple antibiotic resistance. This pathogen is usually acquired exogenously, as it grows in moist environments and also survives on the dry surfaces found in ICUs. However, the usual means of transmission is via the hands of ICU staff, although several outbreaks have also been associated with contaminated nebuliser reservoirs or fibreoptic bronchoscopes [3]. Most infections tend to appear after the second week of hospitalisation, particularly in patients who are receiving broad-spectrum antibiotics. Our findings suggest that the addition of aerosolised ampicillin–sulbactam to the standard intravenous administration of the antibiotic is an effective means of radically decreasing the level of colonisation of the upper respiratory tract by multiresistant *A. baumannii* in ICU patients, thus ameliorating a critical risk factor for the development of ventilator-associated pneumonia.

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Soft-tissue abscess caused by *Salmonella enterica* serovar Enteritidis at the site of melanoma metastasis

Abscesses caused by *Salmonella enterica* serovar Enteritidis are rare in contrast to abscesses caused by serovars Typhi or Paratyphi [1]. However, a recent report in *Clinical Microbiology and Infection* by Spiritus *et al.* [2] described an unusual abscess behind the eye caused by serovar Enteritidis. We wish to report another unusual location of an abscess caused by this serovar.

A 54-year-old female, with intrapulmonary and lymph node metastases and a soft tissue metastasis of malignant melanoma, developed a fever (39 °C) without any clinical signs of sepsis or gastrointestinal symptoms during her sixth course of polychemotherapy. Although the stool cultures were negative, *S. enterica* serovar Enteritidis was isolated from blood culture and was sensitive to piperacillin–tazobactam and cefuroxime. At the site of the soft tissue metastasis on the left flank, there was a hyperthermic and painful infiltrate without any fluctuation. Ultrasonography showed a subcutaneous solid mass with a surrounding inflammatory infiltrate. The patient was treated with intravenous piperacillin–tazobactam 4.5 g every 8 h for 6 days, after which the blood culture and temperature were normal. The infiltrate on the left flank improved noticeably. Four days later, the patient developed a fever (40 °C) and clinical signs of an abscess at the location of the soft tissue metastasis. Microbiological examination of the abscess revealed *S. enterica* serovar Enteritidis. The abscess healed completely following treatment with intravenous piperacillin–tazobactam for a further 7 days and oral cefuroxime for 6 weeks.

The patient may have been infected 4 weeks earlier in hospital when she ate a dessert consisting of a pear with blancmange. Several other patients suffered with diarrhoea at that time, and serovar Enteritidis was isolated from their stool cultures. Further investigations revealed that the